

Remarks:

These remarks are responsive to the Office action dated April 13, 2011. Prior to entry of this response, claims 1-14 were pending in the application. By way of this response, claims 1, 3, and 10 are amended. Applicants respectfully request reconsideration of the application and allowance of the pending claims.

Rejections under 35 U.S.C. § 103

Claims 1-5, 10, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of U.S. Patent No. 7,050,800 (Shaheen et al., hereinafter Shaheen), U.S. Patent No. 6,987,985 (Purkayastha et al., hereinafter Purkayastha), and U.S. Patent Application Publication No. 2004/0101125 (Graf et al., hereinafter Graf).

Applicants traverse the rejection of the claims. Nevertheless, Applicants amend claim 1 to include, among other limitations:

wherein the device is installed at a point in a building where the UMTS-FDD signals cannot provide suitable UMTS-FDD signal coverage to an interior region of the building where there is no other signal coverage, and wherein at said point the UMTS-FDD signals are received by the device, and from said point the device transmits the WLAN signals and the signals according to the PSTN standard and/or the ISDN standard to provide WLAN signal coverage and PSTN and/or ISDN signal coverage to a plurality of different user terminals in the interior region of the building coincidently.

The device of claim 1 is installed at a point in a building where there is *no other signal coverage* in order to solve "deep indoor" problems where not enough signal coverage is provided from outside of the building for an apparatus (e.g., mobile phone, notebook, etc.) in such a "dead zone" to establish communication. The claimed device works as a bridge converting one signal type (UMTS) to another signal type (WLAN, PSTN) and provides signal coverage in these dead zones so that one or more apparatuses can access different networks. In other words, the claimed device operates with at least two connection types active in parallel in order to provide signal coverage to access different networks where there would otherwise be no signal coverage of any type.

In contrast, Purkayastha only mentions switching between different types of established networks when network coverage for one network becomes sporadic in order

to maintain signal coverage during a continuous communication session. In particular, Purkayastha discloses a mobile wireless unit WTRU which provides a continuous connection to a receiver while switching from a wireless connection with a first type to a wireless connection with a second type. In Purkayastha, either the first or the second connection type is active. In contrast, the device of the present invention works as a bridge converting one signal type (UMTS) to another signal type (WLAN, PSTN) requiring at least two connection types to be active in parallel.

Further, Purkayastha fails to disclose a device to solve the "deep indoor" problems. According to Purkayastha, the areas are already provided with either enough UMTS networks or enough WLAN networks. When the WTRU travels from an area provided with a first type of established network to an area provided with a second type of established network, the WTRU is able to provide continuous communication while switching from a first type of wireless connection to a second type of wireless connection. For example, if the WTRU is conducting a UMTS wireless communication via interface 22 and travels into a WLAN service area the communication session is preferably switched to WLAN wireless communication (Purkayastha, column 8, lines 45 - 49). Thus, the WTRU cannot provide WLAN coverage or telephone signals in the building, so that the "deep indoor" problems cannot be solved by the teaching of Purkayastha. In other words, Purkayastha merely discloses switching to established networks for better signal coverage, as opposed to the claimed configuration which transmits signals where there is *no other signal coverage*.

Moreover, Purkayastha fails to disclose providing signal coverage to a plurality of different user terminals in an interior region of a building coincidentally. Rather, Purkayastha merely discloses a single device that switches between a different network, and does not transmit signals for other devices to connect to that network coincidentally.

Furthermore, Shaheen also fails to disclose transmitting signals where there is no other signal coverage to solve the "deep indoor" problems. Rather, Shaheen discloses a configuration where a WLAN is already established inside a building and there is no reason to provide additional signal coverage.

Further still, Graf also fails to disclose transmitting signals where there is no other signal coverage to solve the "deep indoor" problems. Rather, Graf teaches a device that

converts UMTS signals to PSTN signals that is not capable of providing signals to provide suitable signal coverage to an interior region of a building that would otherwise have no coverage.

Thus, even in combination Shaheen, Purkayastha, and Graf do not disclose each and every element of amended claim 1. Therefore, Applicants submit claim 1 is in condition for allowance. Claims 2 and 14 depend from claim 1. Thus, Applicants respectfully request the rejection of claims 2 and 14 be withdrawn for at least the reasons discussed above.

Furthermore, Applicants have amended claims 3 and 10 to include features similar to amended claim 1 that are not disclosed by the combination of Shaheen, Purkayastha, and Graf. Thus, even in combination Shaheen, Purkayastha, and Graf do not disclose each and every element of amended claims 3 and 10. Therefore, Applicants respectfully request the rejection of claims 3 and 10 be withdrawn. Claims 4 and 5 depend from claim 3. Thus, Applicants respectfully request the rejection of claims 4 and 5 be withdrawn for at least the reasons discussed above.

Claims 6 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Shaheen, Purkayastha, and Graf as applied to claim 3, and further in view of U.S. Patent Application Publication No. 2003/0035471 (Pitsoulakis).

As discussed above, the combination of Shaheen, Purkayastha, and Graf does not disclose each and every element of amended claims 3 and 10. Furthermore, Pitsoulakis does not disclose transmitting the WLAN signals and the signals according to the PSTN standard and/or the ISDN standard to provide WLAN signal coverage and PSTN and/or ISDN signal coverage to a plurality of different user terminals in the interior region of the building coincidentally where there is no other signal coverage. Thus, even in combination Shaheen, Purkayastha, Graf, and Pitsoulakis do not disclose each and every element of amended claims 3 and 10. Therefore, Applicants submit claims 3 and 10 are in condition for allowance. Claim 6 depends from claim 3 and claims 11-13 depend from claim 10. Thus, Applicants respectfully request the rejection of claims 6 and 11-13 be withdrawn for at least the reasons discussed above.

Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaheen, Purkayastha, and Graf as applied to claim 1, and further in view of U.S. Patent No. 6,956,846 (Lewis et al., hereinafter Lewis).

As discussed above, Shaheen, Purkayastha, and Graf do not disclose each and every element of amended claim 1. Furthermore, Lewis does not disclose transmitting the WLAN signals and the signals according to the PSTN standard and/or the ISDN standard to provide WLAN signal coverage and PSTN and/or ISDN signal coverage to a plurality of different user terminals in the interior region of the building coincidently where there is no other signal coverage. Thus, even in combination Shaheen, Purkayastha, Graf, and Lewis do not disclose each and every element of amended claim 1. Therefore, Applicants submit amended claim 1 is in condition for allowance. Claims 7-9 depend from claim 1. Thus, Applicants respectfully request the rejection of claims 7-9 be withdrawn for at least the reasons discussed above.

Conclusion

Applicants believe that this application is now in condition for allowance, in view of the above amendments and remarks. Accordingly, Applicants respectfully request that the Examiner issue a Notice of Allowability covering the pending claims. If the Examiner has any questions, or if a telephone interview would in any way advance prosecution of the application, please contact the undersigned attorney of record.

Please charge any cost incurred in the filing of this response, along with any other costs, to Deposit Account No. 503397.

Respectfully submitted,

ALLEMAN HALL MCCOY RUSSELL &
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A handwritten signature in black ink, consisting of several overlapping loops, is written over a horizontal line.

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